

SATURDAY, NOVEMBER 9, 1872.

## ORIGINAL LECTURES.

### CLINICAL LECTURE

#### ON CERTAIN PAINFUL AFFECTIONS OF THE FEET.

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IT is one of the advantages of the custom of lecturing clinically upon groups of cases, that it enables the teacher to bring these into relations for which the more precise method of an essay would be unsuitable. What I am about to say will so fully illustrate my meaning, that I need not pause here to explain myself much more at large. It is often a good and practical mode of teaching which, viewing a collection of cases united in appearance by some common and prominent feature, finally traces this to its various causes, and points out how diverse are the ways in which disease has been acting in the several instances presented.

Those who have followed my clinics with care must have noticed, now and then, cases which were chiefly conspicuous on account of pain in some part of the foot, or in both feet. This, at all events, was what brought them before us; and very often pain, and pain alone, was the marked and dominant symptom. Most happily the cases to which I am now referring are rare; but, besides being rare, they are also difficult to relieve, and yet more difficult to cure.

The patient who is now before us has brought the whole subject anew to my memory, and it may be worth while to use his case as a starting-point from which to study some of the less common forms of pedal pain.

This I shall the more willingly do, because one class at least of foot-pains has not been treated of in the books, and when it first came before me, was altogether a novel malady, so far at least as my experience or my book-knowledge was concerned.

You will now and then meet with persons whose feet are too flat, and who, when walking far, feel a certain amount of aching, and a sense of excessive local fatigue. Something can be done for such sufferers by the aid of proper shoes and equable support to the sole; but the natural difficulty is in itself altogether incurable.

The lad who is here to-day offers also an example of severe pain, which in him accompanies almost every effort at locomotion. He is a robust, well-formed person, in a condition of body which appears to be exceptionally good.

After a youthful life of entirely good health, he engaged in a business which kept him much on his feet and caused him also at times great fatigue. After some months, each occasion of extreme overwork resulted in paroxysms of pain, which were at first limited to the right sole, but soon extended to the left. Somewhat later it was also felt in the front

of the right leg. For a long while rest relieved him, but there came a time when the attacks of pain grew more and more protracted, so that much greater periods of repose were needed to secure complete ease. When, after some years of torment, this man entered the hospital, we found that it was only in the morning that he was clear of pain, and that he had slight spasmodic stiffening of the tibialis anticus, the peroneus longus, and the gastrocnemius muscles, which under other relaxed completely.

After a good deal of discussion and some differences of sentiment in our consultations, Dr. Goodman divided the tendons of these three muscles in both legs, and put the feet at rest in properly constructed apparatus. Great relief followed, and it is said to have been permanent. After a time there was still some annoyance in walking, but it was very much less than before. The pain seems to have been due to the steady strain at the points of insertion of the muscles implicated, a strain of course increased by the varying positions which the feet assumed during exertion.

A few months since, a similar case occurred in the practice of Dr. Goodman, in the person of a young woman, J. M., aged twenty-two; single and in good general health, but rather anæmic in appearance. When sixteen years old, she began to have pain after exercise in the left leg and foot, and the pain was accompanied by violent contraction of the peroneus longus, gastrocnemius, and plantar muscles; at times also the toes became strongly flexed, and in every instance there was pain, not alone in the shortened muscle, but also in the foot, which as time went by became deformed so that she walked on the outside of the sole, and could not bring the heel down, while the foot itself was too much laterally arched. At the time she was seen at this hospital the muscles acted spasmodically in walking, and the pain, which was quite steady, was much increased by such exercise. The bellies of the muscles concerned were sore after exertion, and it was clear to us that not only were the slight deformities due to the spasm of the muscles, but also that the pain felt was in some way related to the spastic manner in which they acted when influenced by volition. Irritations, mechanical or electrical, addressed to the sole, caused no unusual movements, but I found that the muscles at fault were singularly easy to act upon when faradized. When I questioned her closely as to the pain, she insisted that it was steady, that all exercise terribly increased it, and that the worst torment was due to a crampy pain which affected the intrinsic muscles of the plantar region, and contracted the inner side of the foot. This came on daily three or four times a day, and lasted from fifteen to twenty minutes. I found in this, as in the lad's case, no known cause for the disorder, despite an investigation of every organ. She was not examined under anæsthetics.

Two years ago an apparatus was put on her foot, and an effort made to correct its deformities without section of the tendons. The attempt to stretch the shortened muscles gave extreme pain, and was soon abandoned. After consultation, Dr. Goodman and



I decided to divide the tendons of the gastrocnemius and peroneus longus, as well as the contracted plantar fascia. The operation gave immediate relief, and enabled us to straighten the foot and bring down the heel. The spasm of the muscles ceased after the section of the tendons, and although she has at times some annoyance from pain in these muscles, it is not great enough, as it was before, to inhibit exercise.

Last spring I saw a child aged eleven years, who had had, the autumn before, a prolonged ague. Late in the winter, being then to all appearance in robust health, she began to have, when walking, sudden and violent contractions of the right gastrocnemius muscle, which lifted the heel off the ground just at the usual time, that is, at the end of the step, and also held it thus drawn up for a moment. The pain was in the body of the muscle, and was severe. After a minute or two it left as the contraction ceased, to return again in half an hour or less. These spasms kept the muscle sore, and had begun to shorten it permanently. The muscle acted under a faradaic current, which failed to stir its healthier fellow in the left leg. As the child was here but for a day, I wrote an opinion advising section of the muscle. Soon after this, a long illness—a remittent fever, I believe, followed by pneumonia—kept the child nine weeks in bed, and either the long rest or some other agencies, the offspring of disease, entirely cured the spasms, which I learned lately have not returned.

There is to me something most interesting in the study of these curious cases of local spasm. They belong to a wide class called by the French *contractures*, the type of which is seen in those remarkable instances where cold or rheumatism seems to be the remote cause of muscular spasms, which may in time pass away, or may end, as in a case now in the children's ward, in deformity of every mobile portion of every limb. At present they concern us chiefly in their relation to the feet. So far as my own experience in this direction has gone (and it is a rather large one), only those muscular contractions are very painful or permanently so which are persistent enough or frequent enough to alter the shape of the foot and to keep it so deformed. Thus, in the lad whom you have just seen, the spasms were enduring and frequent, and finally caused distinct, although not excessive, deformity, accompanied by a permanent shortening of the disordered muscles. Now, the pain in the muscles existed chiefly when these were in action; but there was also another pain which was present then and remained when the muscle was at rest, and this was found to lie at or about the insertions of the muscles in the foot. In this boy's case there was at the muscular insertions a little puffiness, and at times slight tenderness. These latter symptoms do not always attend upon contractures elsewhere, or even constantly in those which affect the foot. Thus, in a remarkable example of "functional spasm," as I should like to call it,—that is, a spasm which is seen in a muscle when executing an ordinary action,—there was never any pain either in the muscle, although it was somewhat shortened, or at the point of insertion.

Neither in the case of J. W., aged twenty-nine, who was here in December last with a permanent contracture of the biceps, was there pain, save in the elbow and in the muscular mass. What now I most wish to point out is this: that there are rare cases of obscure pain in the feet which seem to be related to contractions of muscles, and that a close study of the case will often show a slight shortening of the muscles and more or less deformation of the foot. Cases of this kind must, I presume, be rare, because, although we see in this building a multitude of deformities of the feet, it is uncommon to find the part painful, no matter how great is the attendant contraction of muscles, no matter how widely the members have departed from the forms of health. Let me add, however, that nearly all of our deformed cases are children, or persons who acquired their disease in childhood, and that two of the three cases I have described were in adult life when their trouble began. In such persons the forms of parts offer greater resistance to change, are no longer plastic, and consequently suffer when subjected to such steady strains as tend to cause displacements. On some other occasion I hope more fully to discuss the various forms of contractures; but at present I have only so far dealt with them as to point out that in certain cases they seem to cause obscure forms of pain in the feet.

(To be continued.)

## SIMPLICITY IN THE CLASSIFICATION OF TUMORS.

SYNOPSIS OF A LECTURE DELIVERED AT THE UNIVERSITY OF PENNSYLVANIA, OCT. 26, 1872,

BY DR. JAMES E. GARRETSON.

THE lecturer commenced his discourse with the suggestion that the histological distinctions of tumors were of little clinical import, and while of profound and most enticing interest to the student of histogeny, yet were of such little matter in practical surgery that he was oftentimes led to doubt whether one might not get along with much less confusion to the subject of diagnosis, without, than with, them. As the subject had presented itself to his experience and his judgment, he said, "Tumors divided themselves, not into a multitude of classes, but simply into two; these two he would designate 'the explainable' and 'the non-explainable.' In the first of these classes was to be placed every tumor having in itself that which explained its presence, examples of which existed in the sebaceous tumors, the herniæ, ranulæ, etc.; in the second belonged without distinction, saving the parasitic, all the remainder the explanation of which has to be sought outside of a local condition; examples in the latter directions being recognized in the nodes of syphilis, the degenerating glandular enlargements of tuberculosis, the multitudinous expressions of cancer."

All tumors of the first class, the lecturer suggested, were in themselves necessarily benign; all of the second class were to be viewed, not in themselves, but in the dyscrasia of which they were to be es-